

CLAIMS

1 1. Pressure limiting valve for a fluid medium under system pressure, with a valve
2 housing, in which are provided an inlet channel and an outlet channel communicating therewith
3 for the medium, wherein the flowrate of the medium can be regulated by an axially movable
4 valve body, in effective connection with an energy accumulator, and interacting with a valve
5 seat, wherein a piston coaxially adjoining the valve body bounds with its lateral surface a throttle
6 gap, which communicates with the inlet channel and can be subjected to pressure directly or
7 indirectly by the energy accumulator.

1 2. Pressure limiting valve according to Claim 1, in which a pilot valve is arranged
2 between the valve housing and the energy accumulator, wherein the pilot valve has a pressure
3 space at the end of the piston away from the valve body, into which the throttle gap emerges, and
4 which is bounded by the end face of the piston, as well as an oppositely situated receiving part
5 and laterally by the inner wall of the sealing sleeve.

1 3. Pressure limiting valve according to Claim 1 or 2, wherein a pressure chamber is
2 provided in the transition region between the valve body and the piston, into which the inlet
3 channel emerges.

1 4. Pressure limiting valve according to Claim 1 or 2, wherein the inlet channel is arranged
2 transversely to the lengthwise axis of the valve body/piston structural assembly.

1 5. Pressure limiting valve according to Claim 1, wherein the valve body in the operating
2 position is arranged centered in a valve seat, forming a gap.

1 6. Pressure limiting valve according to Claim 1, wherein the valve body tapers toward its

2 end away from the piston

1 7. Pressure limiting valve according to Claim 1, wherein the piston is enclosed on its
2 lateral surface by a stationary sealing sleeve.

1 8. Pressure limiting valve according to Claim 1, wherein the piston and the sealing sleeve
2 are made of a wear-resistant material, preferably hard metal.

1 9. Pressure limiting valve according to Claim 1, wherein a leakage bore is provided in
2 order to carry away the medium moving through the throttle gap in the valve housing.

1 10. Pressure limiting valve according to Claim 2, wherein a borehole communicating
2 with the pressure space is arranged in the receiving part and can be closed at its other end by a
3 control cone, which communicates with the energy accumulator.

1 11. Pressure limiting valve according to Claim 1, wherein the leakage bore is arranged in
2 the region near the place where the control cone abuts the receiving part.